AMENDMENT AND RESPONSE UNDER 37 C.F.R § 1.111   **Page 8**
Serial Number:10/721,753   Dkt: 1370.215US1
Filing Date: November 26, 2003
Title: SYSTEM AND METHOD FOR REMOTE MANAGEMENT OF COMMUNICATIONS NETWORKS

REMARKS

This responds to the Office Action mailed on January 16, 2009.

Claims 1, 16 and 21 are amended, no claims are canceled, and no claims are added. As a result, claims 1-22 remain pending in this application.

Support for the amendment to claim 1 is, *inter alia*, in paragraph [0021] of the description.

Claim Objections

Claim 16 was objected to because of the following informality: "system communications system". Claim 16 has been amended appropriately, and withdrawal of the claim objection is respectfully requested.

§ 101 Rejection of the Claims

Claims 9-22 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

In particular, claims 9-20 were rejected as being directed to an apparatus but "having limitations which consist of code not tangibly embodied on a hardware element."[1] The applicant respectfully traverses.

According to the MPEP, assessment of compliance of the claimed invention with 35 U.S.C. § 101 should be in respect of the relevant claim as a whole. In this regard, the MPEP[2] quotes *Diamond v Diehr*[3] as follows: "*In determining the eligibility of respondents' claimed process for patent protection under §101, their claims must be considered as a whole.*" When claim 9 is thus considered as a whole, it will be noted that it is in respect of a communications system. The system comprises particular machine- or system elements, such as an enterprise network, a control unit, a public network, and a proxy server. Therefore, even if the limitation of clam 9 were in respect of code which is not embodied in a tangible medium (which is traversed),

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[1] Office Action, page 2, paragraph 8.
[2] MPEP 2106 II.
[3] *Diamond v. Diehr*, 450 U.S. 175, 188-89, 209 USPQ 1, 9 (1981).

claim 9, as a whole, is directed to a communications system and it is accordingly respectfully submitted that claim 9, when considered as a whole, is directed to statutory subject matter.

The above argument is explicitly supported by MPEP 2106.01 I, which states: "*Computer programs are often recited as part of a claim. USPTO personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e. to only its description or expression, is it descriptive material per se and hence nonstatutory.*" Again, claim 9, as a whole, is not directed "to a mere program listing," and it is submitted that claim 9, and hence also its dependent claims 10 and 11, is directed to statutory subject matter, in view of MPEP 2106.01.

Likewise, independent claims 12 and 16 are also in respect of communications system and the arguments presented above apply *mutatis mutandis* to claims 12 and 16 and their dependent claims 13-15 and 17-20.

The Applicant thus respectfully requests reconsideration and withdrawal of the rejection of claims 9-20 under 35 U.S.C. § 101.

Claims 21 and 22 are rejected as not falling within one of the four statutory categories of invention. Claim 21 is amended to specify that some of the operations comprising the method are performed by processors. Further, certain of the operations are specified as being performed automatically, which clearly distinguishes these operations from purely mental steps or mathematical manipulations of functions. At least some of the operations the claimed method therefore inherently require a machine/apparatus, and the claim consequently recites a structural tie to a statutory class of invention. Claim 22 is dependent on claim 21.

It is therefore respectfully submitted that claims 21 and 22 are directed to statutory subject matter. The Applicant thus respectfully requests reconsideration and withdrawal of claims 21 and 22 under 35 U.S.C. § 101.

§ *102 Rejection of the Claims*

Claims 1-2, 6, 9-10, 12-13, 16-17, and 19-22 were rejected under 35 U.S.C. § 102(e) as being anticipated by Christie, IV (U.S. Patent No. 7,254,832; hereafter "Christie"). The applicant respectfully traverses.

Claim 1

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.[4] It is not enough, however, that the reference discloses all the claimed elements in isolation. Rather, "[a]nticipation requires the presence in a single prior reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*"[5]

As a threshold issue, it is to be noted that claim 1 is directed to a different technological field than the disclosure of Christie, and that, as a result, a number of elements of claim 1 are not taught by Christie.   In particular, claim 1 is in respect of a method for controlling a network remotely, while Christie is directed to firewall control for secure private networks with public VoIP access. While the method of claim 1 is thus directed to remote control of a network by the establishment of a session between a control unit and a proxy server which is outside a firewall, the method of Christie teaches communication between media gateway controllers on opposite sides of a firewall, not to enable network management via the connection, but merely to open a pinhole in the firewall for direct connection between VoIP devices on opposite sides of the firewall. Nevertheless, claim 1 is amended to expedite grant of the application.

Claim 1, as amended, recites, in part: "*configuring a first control unit, inside a first firewall,…to control the network;*

configuring a <u>*proxy server*</u> *outside the first firewall;…and*

establishing a connection between the proxy server and a console, to permit <u>*remote user management*</u> *of the network by communication between the first control unit and the console via the proxy server*" (emphasis added).

In contrast, Christie fails to disclose a number of the elements of claim 1. First, according to the Office Action's interpretation, Christie discloses a proxy server in the form of media gateway controller 255,[6] which is traversed. One definition of the function of a proxy

[4] *In re Dillon* 919 F.2d 688, 16 USPQ 2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991).
[5] *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added).
[6] Office Action, page 3, paragraph 10.

server is that it "*allows clients to make indirect network connections to other network services.*"[7]
The proxy server of claim 1 conforms to this definition, as the proxy server acts as an
intermediary between a first control unit and a console. If the media gateway controller 255 of
Christie were to represent a proxy server, according to the Office Action's interpretation, then it
could be expected that a connection between media gateway controller 205 and media gateway
260 is established through media gateway 255, serving as proxy server. Instead, communication
between the media gateway controllers 205 and 255 on opposite sides of the firewall is not to
provide indirect communication of media gateway 260 with media gateway controller 205 or
with media gateway 210 via the media gateway controller 255, but it is aimed at opening a
pinhole in the firewall to permit <u>direct</u> connection between the media endpoints. The media
gateway controller 255 in Christie therefore does not function as a "proxy server".

     The fact that the media gateway controller 255 is not a proxy server is reinforced by the
following quotation from Christie, in which it is explained that the arrangement of media
gateway controllers 205 and 255 to open a pinhole in the firewall for direct connection of media
endpoints is aimed specifically at <u>avoiding</u> the use of proxies:

> "Alternatively, protocol specific "proxies" have been built which understand specific
> protocols and are, in effect, a widening of the firewall-an alternate path into the secure
> private network for a specific protocol suite. Unfortunately, these implementations
> possess performance characteristics that cannot meet the requirements of VoIP media
> streams."[8]

     Secondly, Christie makes no mention of remote <u>management</u> of the network, and
especially does not describe remote <u>user</u> management, as Christie is directed to establishing
VoIP connections. The claim element of permitting "remote user management of the network by
communication between the first control unit and the console via the proxy server" is therefore
not disclosed by Christie.

     As Christie does not teach each and every element of claim 1, it is submitted that Christie
does not anticipate claim 1 and its dependent claims 2 and 6. The Applicant therefore requests
withdrawal and reconsideration of the rejection of claims 1, 2 and 6 under 35 U.S.C. § 102(e).

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[7] *Network Dictionary*, Jawin, Published by Jawin Technologies Inc., 2007, page 390.
[8] Christie, column 1, line 65 to column 2, line 4.

Claim 9

Claim 9 recites, in part: "*a proxy server located outside the first fire wall and*
implemented within a De-Militarized Zone (DMZ) between the first enterprise network and the
public network, the first control unit being configured with proxy server information, the proxy
server being configured with first control unit information, the first control unit being further
configured to send a first access key to the proxy server, the first control unit and the proxy
server configured to establish a communication session based on the first access key, the proxy
server to aggregate and store performance data provided by the first control unit" (emphasis
added).

A number of the elements of claim 9 are not taught or suggested by Christie. As argued
above with reference to novelty of claim 1, Christie does not disclose a proxy server.

Furthermore, Christie makes no mention of a De-Militarized Zone (DMZ), let alone
implementation of the proxy server in a DMZ. The Office Action refers to column 5, lines 15-40
of Christie in support of its assertion that these features are disclosed by Christie,[9] but the
referenced part of Christie describes communication between the media gateway controllers 205
and 255 through "*an optionally secure tunnel such as an IPSec session pre-authorized through*
the firewall"[10], to create a pinhole in the firewall. An IPSec session is distinctly different from a
DMZ, and the Office Action's position that Christie teaches use of a DMZ is traversed.

Finally, Christie makes no mention of aggregation and storage by the "proxy server"
(gateway media controller 255) of performance data provided by the "first control unit" (gateway
media controller 205). Not only is there no explicit mention of such aggregation of performance
data, but, in view of the function of gateway media controller 255 in Christie, there would be no
purpose in the system of Christie for the media gateway controller 255 to aggregate such
performance data.

In view of the absence from Christie of the above-discussed claim elements, it is
submitted that Christie does not anticipate claim 9 and, by extension, its dependent claim 10. The
Applicant therefore requests withdrawal and reconsideration of the rejection of claims 9 and 10
under 35 U.S.C. § 102(e).

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[9] Office Action, page 4, line 16.
[10] Christie, column 5, lines 19-20.

Claim 12

Claim 12 recites, in part: "*a proxy server, to aggregate and store performance data provided by the first control unit, that includes at least one of a client request handler, a shared request object pool, or a server request handler, the proxy server being implemented within a De-Militarized Zone (DMZ) between the first enterprise network and the public network*" (emphasis added).

As argued above with reference to non-anticipation of claims 1 and 9, Christie fails to disclose a proxy server, location of the proxy server in a DMZ, and aggregation by the proxy server of performance data. These arguments thus apply *mutatis mutandis* to claim 12, and it is submitted that Christie does not anticipate claim 12 nor, by extension, its dependent claim 13. The Applicant therefore requests withdrawal and reconsideration of the rejection of claims 12 and 13 under 35 U.S.C. § 102(e).

Claim 16

Claim 16 recites, in part: "*a proxy server coupled to the first console, the proxy server configured to pool the at least one request, and to provide access from at least one console to the first control unit and to aggregate and store performance data provided by the first control unit, the proxy server being implemented within a De-Militarized Zone (DMZ) between a protected network and the unprotected public network*" (emphasis added).

The arguments presented above in respect of claim 12 apply equally to claim 16, and it is submitted that claim 16 and its dependent claims 17, 19 and 20 are not anticipated by Christie. The Applicant therefore requests withdrawal and reconsideration of the rejection of claims 16, 17, 19 and 20 under 35 U.S.C. § 102(e).

Claim 21

Claim 21 is amended to expedite grant of the application and recites, in part: "*at a proxy server, receiving a console request message from a console, the console request message including at least one of a request for network management data, a request for Internet Protocol*

(IP)-Private Branch Exchange (PBX), or a request for status information; automatically creating a _request object_; [and] adding the request object to a _pool_" (emphasis added).

First, as argued above, Christie does not disclose a proxy server.

Secondly, it is submitted that Christie does not explicitly teach receiving a console request message as claimed. The extent of communication between the MCGs 205 and 255 in Christie is described in the following extract:

> "Media gateway controller 205 which is within the private network,
> communicates with media gateway controller 255 via call signaling path 280 in
> order to define the destination media gateway on the public network. Similarly, if
> a call is incoming to a private side media gateway 210, private side media
> gateway controller 205 is contacted first by public network media gateway
> controller 255. The media gateway controllers 205, 255 exchange call signaling
> information regarding media gateway endpoints 210, 260."[11]

Neither this extract, nor the remainder of the document, describes receiving a console request message at a proxy server and notifying a control unit of a request object created in response to the console request message. Furthermore, Christie is wholly silent as to the creation of a request object and addition of the request object to a pool.

It is thus submitted that claim 21 and, by extension, its dependent claim 22 are not anticipated by Christie, and the Applicant requests withdrawal and reconsideration of the rejection of claims 21 and 22 under 35 U.S.C. § 102(e).

§ _103 Rejection of the Claims_

Claims 3-5, 7-8, 11, 14-15, and 18 were rejected under 35 U.S.C. § 103(a) as being obvious over Christie, IV (U.S. Patent No. 7,254,832).

As discussed in _KSR International Co. v. Teleflex Inc. et al._ (U.S. 2007), the determination of obviousness under 35 U.S.C. § 103 is a legal conclusion based on factual evidence.[12] The legal conclusion, that a claim is obvious within § 103(a), depends on at least

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[11] Christie, column 5, lines 35-45.
[12] See _Princeton Biochemicals, Inc. v. Beckman Coulter, Inc._, 7, 1336-37 (Fed. Cir. 2005).

four underlying factual issues set forth in *Graham v. John Deere Co. of Kansas City*[13]: (1) the scope and content of the prior art; (2) differences between the prior art and the claims at issue; (3) the level of ordinary skill in the pertinent art; and (4) evaluation of any relevant secondary considerations.

As discussed above with reference to the § 102 rejection, independent claims 1, 9, 12 and 16 respectively include claim elements which are not taught or suggested by the cited references. As none of the references teaches or suggests the claim elements discussed above, no combination of the references can provide these claim elements, and it is therefore submitted that independent claims 1, 9, 12 and 16 are non-obvious. In addition, any claim depending from a non-obvious independent claim is also non-obvious.[14] Therefore, claims 3-5, 7-8, 11, 14-15, and 18 should also be non-obvious, and the Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 3-5, 7-8, 11, 14-15, and 18 under 35 U.S.C. § 103(a).

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[13] 383 U.S. 1, 17 (1966).
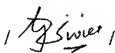[14] See MPEP § 2143.03.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and
notification to that effect is earnestly requested. The Examiner is invited to telephone
Applicant's representative at (408) 278-4041 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any
overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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